THE OHIO JOURNAL OF SCIENCE

VOLUME XL — 1940

LAURENCE H. SNYDER, Editor-in-Chief

PUBLISHED AT COLUMBUS, OHIO, BY THE

OHIO STATE UNIVERSITY

and the

OHIO ACADEMY OF SCIENCE

THE OHIO JOURNAL OF SCIENCE

ADMINISTRATIVE BOARD

For Ohio State University	For Ohio Academy of Science
F. C. Blake	A. W. Lindsey
E. N. Transeau	J. R. Patrick

EDITORIAL STAFF

Laurence H. Snyder.....Editor in Chief
Bernard S. Meyer.....Business Manager
John A. Miller.....Associate Business Manager

J. B. Park.....Agronomy	J. Ernest Carman.....Geology
R. A. Knouff.....Anatomy	W. H. Shideler.....Paleontology
H. H. M. Bowman.....Botany	C. W. Jarvis.....Physics
R. C. Burrell.....Chemistry	F. A. Hitchcock.....Physiology
E. Lucy Braun.....Ecology	J. P. Porter.....Psychology
F. C. Waite.....Embryology	E. R. Hayhurst.....Public Health
G. D. Hubbard.....Geography	R. V. Bangham.....Zoology

THE OHIO JOURNAL OF SCIENCE

Is published jointly by the Ohio State University and the Ohio Academy of Science.

TABLE OF CONTENTS

VOLUME XL

NUMBER 1—JANUARY

Page

Geographic Variation in Eastern North American Savannah Sparrows (*Passerculus sandwichensis*) ..... *John W. Aldrich* 1

A Study of the Effects of Increased Iodine Feeding to a Herd of Sixty Dairy Cows.. *Jerome H. Meyer, Norman L. Matthews and George M. Curtis* 9

The Structure and Thickness of the Clinton and Berea Formations in the Vicinity of Wooster, Ohio ..... *Karl ver Steeg* 25

Five Mucrotrichaphis Aphids..... *George F. Knowlton and Merlin W. Allen* 31

A New Acmaeodera from the Southwest (Coleoptera: Buprestidae), *Josef N. Knull* 36

Factors Which Affect the Growth of a Colorless Flagellate, *Astasia klebsii*, in Pure Cultures ..... *Herman von Dach* 37

Three New Species of Psyllidae with Notes on Others..... *John S. Caldwell* 49

Book Notices 8, 24, 35, 50, 51, 52

NUMBER 2—MARCH

Crinoids from the Silica Shale, Devonian, of Ohio..... *Grace A. Stewart* 53

The Mechanism of Drug Control of Gastric Motility, *Frank E. Hamilton, M. D. and George M. Curtis, M. D.* 63

The Developmental History of Germaria in Parthenogenetic Female Aphids, *Chester A. Lawson* 74

The Embryology and Larval Development of the Goldfish (*Crassius auratus* L.) from Lake Erie ..... *Helen I. Battle* 82

The Alimentary Canal of *Diplotaxis liberta* Germ. (Scarabaeidae: Coleoptera), *Clyde Roosevelt Jones* 94

Book Notices 73, 81, 93, 104–110

The Ohio Academy of Science Membership List, 1940 111

NUMBER 3—MAY

The Carbon and Nitrogen Metabolism of *Stereum Gausapatum* Fries, *J. Arthur Herrick* 123

New and Rare Spiders from the Great Smoky Mountain National Park Region ..... *W. M. Barrows* 130

Notes on Some Ohio Aphids ..... *Clyde F. Smith* 139

Spiders and Insects Found Associated with Sweet Corn with Notes on the Food and Habits of Some Species ..... *Ray Thomas Everly* 143

Notes on Subtropical Plants and Animals in Ohio..... *Charles Otto Masters* 147

Three New Australian Encyrtid Genera..... *A. A. Girault, B. Sc.* 149

A Comparison of Plankton Counts from the Trap-net and Water Bottle Centrifuge Techniques ..... *Walter C. Kraatz* 151

An Ecological Effect of the New England Hurricane..... *Mary D. Rogick* 163

Book Notices 129, 142, 148, 150, 161, 162, 168, 169

Notice to Members of Ohio Academy of Science 170

NUMBER 4—JULY

Report of the Fiftieth Annual Meeting of the Ohio Academy of Science, *William H. Alexander, Secretary* 173

Storage Tests with Seed Corn ..... *J. D. Sayre* 181

The Microscopic Flora and Fauna of Tree Holes ..... *James B. Lackey* 186

The Soil as an Ecological Factor in the Abundance of Aquatic Chironomid Larvae ..... *George Wene* 193

Additions to the Revised Catalogue of Ohio Vascular Plants, VIII, *Clyde H. Jones* 200

Book Notices 185, 217, 218

NUMBER 5—SEPTEMBER

A Record of the Body Weight and Certain Organ and Gland Weights of 3690 Animals ..... *George Crile, M. D., and Daniel P. Quiring, Ph. D.* 219

Limnological Studies of Buckeye Lake, Ohio, *Willis L. Tressler, Lewis H. Tiffany, and Warren P. Spencer* 261

Book Notices 260

NUMBER 6—NOVEMBER

Limnological Studies of Western Lake Erie. I. Plankton and Certain Physical-Chemical Data of the Bass Islands Region, from September, 1938, to November, 1939 ..... *David C. Chandler* 291

Total Distribution of Taste Buds on the Tongue of the Pup .. *John C. Holliday* 337

On the Biology of *Drosophila immigrans* Sturtevant with Special Reference to the Genetic Structure of Populations ..... *Warren P. Spencer* 345

Two New Buprestidae ..... *Josef N. Knull* 362

Book Notices 363–368

Index to Volume 369